WHAT IS CLAIMED IS :

1.   A system for exchanging information on a network, comprising:

       a switch coupled to a port;

       an address table;

       a computer having an address, said computer coupled to said port; and

       a private network assigned to said port by said switch according to said address table.

2.   The system of claim 1, wherein said private network is a virtual local area network.

3.   The system of claim 1, wherein said address table is stored at said switch.

4.   The system of claim 1, wherein said address table includes an address to identify said computer.

5.   The system of claim 4, wherein said address is a media access control address.

6.   The system of claim 1, wherein said switch includes a wire to said port.

7.   The system of claim 1, further comprising an Ethernet switch for controlling an Ethernet network.

8.   The system of claim 1, further comprising a broadband connection connecting said network with an external virtual private network.

9.   A method for communicating over a network from a plurality of ports, the method comprising:

       issuing a data packet having an address from a computer connected to a port;

4   determining a network accessible by said computer according to an address table

5   using said address; and

6   assigning said network to said port by said switch.

1   10.   The method of claim 9, further comprising determining if said port is assigned.

1   11.   The method of claim 9, further comprising accessing said address table

2   containing said address.

1   12.   The method of claim 11, further comprising updating said address table.

1   13.   The method of claim 9, further comprising unassigning said port when said

2   computer is disconnected from said network.

1   14.   The method of claim 9, further comprising sending an alarm message when said

2   address does not correspond to said network.

1   15.   The method of claim 9, further comprising receiving data from said network at

2   said port.

1   16.   The method of claim 9, further comprising accessing shared resources from said

2   port.

1   17.   A method for assigning an external network to a port using a switch, comprising:

2   receiving data from said external network;

3   sending a data packet to said port;

4   retrieving an address from said port in response to said data packet;

5   creating a virtual network correlating to said external network; and

6   assigning said virtual network to said port according to said address.

1 18.   The method of claim 17, further comprising finding said address in an address
2 table at said switch.

1 19.   The method of claim 17, wherein said receiving step includes receiving said data
2 via an Ethernet hub.

1 20.   A switch coupled to a broadband connection, and connected to a plurality of
2 ports, comprising:
3   an address table listing addresses that correspond to a plurality of private
4 networks; and
5   switch fabric coupled to said plurality of ports to support said plurality of private
6 networks.

1 21.   The switch of claim 20, further comprising a memory that stores said address
2 table.

1 22.   The switch of claim 20, wherein said addresses are deleted and added to said
2 address table.

1 23.   A switch that assigns ports, said switch coupled to a computer-readable
2 medium, said computer-readable medium having instructions stored thereon, the
3 instructions comprising steps for:
4   receiving data from an external network;
5   sending a data packet to a port;
6   retrieving an address from said port in response to said data packet;
7   creating a virtual network correlating to said external network; and
8   assigning said virtual network to said port according to said address.

1 24.   The switch of claim 23, further comprising switch fabric coupling said switch
2 to said ports.

1 25. A broadband connection system, comprising:
2   an Ethernet hub for supporting virtual private networks; and
3   a switch having an address table to assign said virtual private networks according
4 to an address table.

1 26. The broad band connection system of claims 25, further comprising ports
2 coupled to said switch, wherein said virtual private networks are assigned to said ports.

1 27. The broad band connection system of claim 25, further comprising an address
2 stored in said address table, said address correlating to one of said virtual private
3 networks.

1 28. A method for exchanging information over a virtual local area network at a port,
2 comprising:
3   receiving a computer at said port;
4   issuing a data packet having an address from said computer to a switch;
5   identifying said virtual local area network according to said address;
6   assigning said virtual local area network to said port;
7   accessing said virtual local area network with said computer at said port; and
8   exchanging information over said virtual local area network from said computer
9 to a virtual private network, wherein said virtual private network corresponds to said
10 address.

1 29. The method of claim 28, wherein said identifying includes accessing an address
2 table at said switch, said address table storing said address corresponding to said virtual
3 local area network.

1 30. The method of claim 28, further comprising revoking access at said port when
2 said virtual local area network is terminated.

1   31.   The method of claim 28, further comprising blocking said computer from said

2   virtual local area network when said address is not identifiable by said switch.

1   32.   A system for exchanging information from a plurality of ports to external private

2   networks, comprising:

3   a switch coupled to said plurality of ports, said switch including an address

4   table;

5   a virtual local area network created by said switch according to an address in said

6   address table, and assigned to a port of said plurality of ports;

7   a computer coupled to said port, said computer including said address correlating

8   to said virtual local area network; and

9   a modem coupled to said switch via an Ethernet hub, said modem to exchange

10   information from said virtual private network assigned to said port to an external virtual

11   private network corresponding to said computer.

1   33.   The system of claim 32, further comprising a broadband connection to said

2   modem, said broadband connection including said external virtual private network.

1   34.   The system of claim 32, wherein said address table is stored as a file.

1   35.   The system of claim 32, further comprising a private port coupling said virtual

2   local area network to said switch.